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(54) Title: BACKTERIAL EFFECTOR PROTEINS WHICH INHIBIT PROGRAMMED CELL DEATH

(57) Abstract: The present invention relates to a bacterial effector protein which inhibits programmed cell death in eukaryotes and a nucleic acid molecule encoding such a protein. The present invention also relates to methods of suppressing programmed cell death in eukaryotes, delaying senescence in plants, and increasing protein expression in plants. The present invention further relates to a nucleic acid construct having a nucleic acid molecule encoding a first protein, which suppresses immunity by inhibition of programmed cell death in eukaryotes, coupled to a nucleic acid molecule encoding a second protein which is toxic when expressed in eukaryotes. Additionally, the present invention provides a method of stabilizing a transgenic plant transformed with such a nucleic acid construct. Finally, the present invention provides a method of treating subjects for a condition mediated by programmed cell death involving administering to the subject a bacterial effector protein which inhibits programmed cell death.

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